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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	SEQUENCE NO.
10.085,982	10/24/2001	Nir Hacohen	2825.2019-001	7046

7590 07/17/2003

Lisa M. Treannie, Esq.  
HAMILTON, BROOK, SMITH & KEYNOLDS, P.C.  
530 Virginia Road  
P.O. Box 9133  
Concord, MA 01742-9133

EXAMINER

SMITH, CAROLYN L.

ART UNIT	PAPER NUMBER
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1631

DATE MAILED: 07/17/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/085,982

Applicant(s)

HACOHEN ET AL.

Examiner

Carolyn L Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1,5-9,12,17,18,22,45,48-51 and 55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1,5-9,12,17,18,22,45,48-51 and 55 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

The cancellation of claims 2-4, 10-11, 13-16, 19-21, 23-44, 46-47, 52-54, and 56-58 as well as the amendment of claims 7-9, 12, 18, and 55 in Paper No. 5, filed 8/5/02, are acknowledged.

#### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1, 5-6, 7-9 (amended), 51, and 55 (amended), drawn to methods of pathogenic identification and infection diagnosis, classified in class 435, subclasses 6, 7.1, and 69.1.  
If this Group is elected then the below summarized specie election is also required.
- II. Claim 12 (amended), drawn to a method for predicting prognosis for an infected individual, classified in class 702, subclass 19. If this Group is elected then the below summarized specie election is also required.
- III. Claim 17, drawn to a method of optimizing a vaccine, classified in class 514, subclass 44 as well as class 424, subclass 9.2. If this Group is elected then the below summarized specie election is also required.
- IV. Claim 18 (amended), drawn to an ex vivo treatment for a disorder, classified in class 514, subclasses 2 and 44.
- V. Claim 22, drawn to a method of measuring the immune response to a stimulus, classified in class 435, subclass 7.1. If this Group is elected then the below summarized specie election is also required.

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VI. Claims 45 and 48-50, drawn to databases and method of generating a database of stimulus-responsive genes, classified in class 702, subclass 19 as well as class 211, subclass 41.12. If this Group is elected then the below summarized specie election is also required.

**Specie Election Requirement for Groups I-VI:**

This application contains claims directed to the following patentably distinct species of the claimed invention:

For Groups I, II, III, V, and VI:

Specie A: method involving a nucleic acid

Specie B: method involving a polypeptide

For Group IV:

Specie C: an agent which is a pathogen

Specie D: an agent which is a tumor

Specie E: an agent which is a self-antigen

Specie F: an agent which is a component of one or more of the agents listed above

(If Specie F is elected, please specify which components)

Applicant is required under 35 U.S.C. 121 to elect a single disclosed specie for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be

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allowable. This distinctness or independence of a nucleic acid versus polypeptide (Groups I-III, V, and VI) is because they are directed to different chemical types, where the critical features are nucleic acids and polypeptides, respectively. The distinctness of the different types of agents is because they are directed to different entities. The completely separate chemical and entity types are often separately characterized and published in literature, thus adding to the search burden if both species were examined together. Also, processing that may connect two species does not prevent them from being considered distinct because enough processing can result in the production of any composition from another composition as long as the processing is not limited in occurrences such as subtractions, additions, and enzymatic action. Thus, the two species are independent and/or distinct invention types for restriction purposes.

Applicant is advised that a reply to this requirement must include an identification of the specie that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should an applicant traverse the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the

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examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

The inventions are distinct, each from the other because of the following reasons:

Although there are no provisions under the section for "Relationship of Inventions" in M.P.E.P. § 806.05 for inventive groups that are directed to different methods, restriction is deemed to be proper because these methods appear to constitute patentably distinct inventions for the following reasons: Groups I-VI are directed to processes and methods that recite structurally and functionally distinct elements, are not required one for the other, and/or achieve different goals. Group I is directed to identifying pathogens and diagnosing infection which is different from the goals of the other groups. Group II requires correlation of clinical prognosis with gene profiling which is not required in any other group. Group III is directed to vaccine optimization which includes unique method steps not used in any other group. Group IV is directed to ex vivo treatment which differs from the goals of the other groups. Group V is directed to measuring immune responses which is a goal not found in the other Groups. Group VI is directed to databases and generating such databases which are not required in any other Group. These distinct processes and methods are often separately characterized and published in literature and would add undue search burden if they were all examined together. Thus, they are considered distinct invention types for restriction purposes.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement may be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR §1.6(d)). The CM1 Fax Center number is either (703) 308-4242 or (703) 305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn Smith, whose telephone number is (703) 308-6043. The examiner can normally be reached Monday through Friday from 8 A.M. to 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached on (703) 308-4028.

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Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instruments Examiner Tina Plunkett whose telephone number is (703) 305-3524 or to the Technical Center receptionist whose telephone number is (703) 308-0196.

July 14, 2003

*Arden B. Marshall*